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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,280	09/21/2000	Kyoung Ro Yoon	P-127	8463
34610	7590	06/17/2004	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			DUONG, OANH L	
			ART UNIT	PAPER NUMBER
			2155	12

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/666,280	YOON ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Oanh L. Duong	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 05 April 2004.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-31 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 9.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____ .

***Response to Arguments***

1. Applicant's arguments with respect to claim 1-31 have been considered but are moot in view of the new ground(s) of rejection.

Examiner respectfully requests applicant particularly points out where in the specification supports each of new limitations in the new and/or amended claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**.

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Drawing Objection***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the

feature "the user registration information includes a time and place of the user" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 2155

3. Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically the claims are directed toward a data structure per se. Such claimed data structures do not define any structure and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized (see MPEP § 2106).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, It is not clear what a time of the user implies to. For example, the time the user wants the information to be displayed, or the time the user registers the information or the like.

Regarding claim 20, "at least two of " is not clear that applicant implies to two levels, two structures, or the like.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2155

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-14, 16-19 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fruensgaard et al. (Fruensgaard) (US 2002/0052880 A1) in view of Herz et al. (Herz) (US 5,758,257) in further view of Bieganski et al. (Bieganski) (US 6,412,012 B1).

Regarding claim 1, Fruensgaard teaches a user information structure comprising:

person information to identify each user (e.g., see page 2 paragraph 27); user preference information of the identified user (e.g., see page 1 paragraph 3); and information is organized in a multiple-level hierarchical structure (page 9 paragraph 196-204).

Fruensgaard does not explicitly teach individual user preference information of said user preference information as claimed.

Herz, in the same field of endeavor, teaches individual user preference information of said user preference information, each of which is configured to be differently depending on the user's registration (col. 4 lines 43-46), wherein the user registration includes a time and place of the user (col. 5 lines 23-37). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the time and place of Herz in the user information structure in Fruensgaard because it was conventionally employed in

the art to allow highly customized results to be provided to the user according to the user's objective preferences

Bieganski, in the same field of endeavor, teaches wherein each of the individual user preference information contains attributes of items being searched and a corresponding value of the user for each of the attributes (col. 2 lines 20-34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the preference value of Bieganski in the information structure of Fruensgaard because such preference value would indicate the strength of the user's preference for the item, thereby allowing optimal result to be returned to the user.

Regarding claim 2, Fruensgaard teaches a unique identifier which can be used to identify said user (e.g., see page 4 paragraph 95).

Regarding claim 3, Fruensgaard teaches one or more history record of information usage by said user (e.g., see page 2 paragraph 44)

Regarding claim 4, Fruensgaard teaches a list of information or information identifier with when and how the information is used (e.g., see page 3 paragraph 54 and paragraph 56).

Regarding claim 5, Fruensgaard teaches the history record includes a condition of history collection for each history record (e.g., see page 2 paragraph 39).

Regarding claim 6, Fruensgaard teaches the condition of history collection includes location of the history location (e.g., see page 6 paragraph 151).

Regarding claim 7, Fruensgaard teaches time of the history collection (e.g., see page 2 paragraph 39).

Regarding claim 8, Fruensgaard-Herz teaches authorization information to identify the information which said user can access (Herz, col. 25 lines 53-64).

Regarding claim 9, Fruensgaard teaches each individual user preference information includes a user preference item and a value representing preference/non-preference information (e.g., see page 6 paragraph 154)

Regarding claim 10, Fruensgaard teaches each user preference information includes a description information on the said user preference item (e.g., see page 2 paragraph 39).

Regarding claim 11, Fruensgaard teaches each user preference item includes description on the item that can be used as a condition of using the individual user preference information for searching or filtering a multi-media information (e.g., see page (e.g., see page 2 paragraph 39)).

Regarding claim 12, Fruensgaard teaches each individual user preference information has a hierarchical relationship (e.g., see page 9 paragraph 202).

Regarding claim 13, Fruensgaard teaches user preference item has a hierarchical relationship (e.g., see page 9 paragraphs 204-211).

Regarding claim 14, Fruensgaard teaches hierarchical relationships are hierarchical tree structures (e.g., see page 9 paragraph 204).

Regarding claims 16 and 17, Fruensgaard teaches each individual user preference information has hierarchical structure which is represented by the

identifier of the user preference item located in the higher nodes of the tree structure (e.g., see page 9 paragraph 204).

Regarding claim 18, Fruensgaard teaches each user preference information has a hierarchical structure which is represented by an external item dictionary (e.g., see page 2 paragraph 44 and page 9 paragraphs 196-204).

Regarding claim 19, Fruensgaard teaches only the individual user preference information located as the leaf nodes of the hierarchical tree structure are stored, and the individual user preference information located at non-leaf nodes of the hierarchical tree structure are extracted based on the relationship among the leaf nodes and upper nodes items (e.g., see page 3 paragraph 49-54).

Regarding claim 26, Fruensgaard-Herz-Bieganski teaches at least one value representing preference/non preference information (Bieganski, col. 2 lines 21-34).

Regarding claim 27, Fruensgaard-Herz-Bieganski teaches one of a plurality of devices at which the user registers, and wherein individual user preference information is different for the same user (Herz, col. 5 lines 22-37).

Regarding claim 28, Fruensgaard-Herz-Bieganski teaches one of a plurality of locations, wherein individual user preference information is different for the same user according to the physical location (Herz, col. 5 lines 22-37).

Art Unit: 2155

5. Claims 20-25 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fruensgaard et al. (Fruensgaard) (US 2002/0052880 A1) in view of Herz et al. (Herz) (US 5,758,257).

Regarding claim 20, Fruensgaard teaches a method for providing multimedia information to the information consumer using the user information with multiple hierarchical structure in the multimedia information environment where information providers desired information of information consumers (e.g., see abstract and page 5 paragraphs 116-128), comprising:

establishing multiple multi-level hierarchical structure of individual user preference information distinguished by each user (e.g., see page 9 paragraphs 196-215);

searching desired information based on a preference item with preference/nonpreference information by said each user and each search item (e.g., see abstract); and

providing retrieved information according to the user preference information (e.g., see page 4 paragraphs 72 and 76).

Fruensgaard does not teach at least two of the multi-level hierarchical structure of individual user preference information have different preference/non-preference information for the same single preference item for the same user.

Herz, in the same field of endeavor, teach at least two of the multi-level hierarchical structure of individual user preference information have different preference/non-preference information for the same single preference item for the same user (col. 5 lines 22-37). It would have been obvious to one having

Art Unit: 2155

ordinary skill in the art at the time the invention was made to have utilized the information of Herz in the process of retrieving information of Fruensgaard because it was conventionally employed in the art to allow highly customized results to be provided to the user according to the user's objective preferences

Regarding claim 21, Fruensgaard teaches in step of said providing the retrieved information, retrieval of new information is notified to the user, or information expected to be preferred by the user is recommended to the user, or information expected not to be preferred by the user is limited to access, according to the individual user preference information (e.g., see page 2 paragraph 37).

Regarding claim 29, Fruensgaard-Herz teaches a plurality of individual user preference information containing different preference according to a place and time of the user (Herz, col. 5 lines 22-37).

Regarding claim 30, Fruensgaard-Herz-Bieganski teaches one of a plurality of locations, wherein individual user preference information is different for the same user according to the physical location (Herz, col. 5 lines 22-37).

Regarding claim 22, Fruensgaard teaches a method comprising:  
establishing a multiple hierarchical structure having individual user preference formation (e.g., see page 9 paragraphs 196-215);

Fruensgaard does not teach changing individual user preference information.

Herz, in the field of endeavor, teaches changing each individual user preference information, wherein each individual user preference information

changes for the same user according to a place of the user (col. 5 lines 22-37). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the changing step of Herz in the process of retrieving information of Fruensgaard because it was conventionally employed in the art to allow highly customized results to be provided to the user according to the user's objective preferences.

Regarding claim 23, Fruensgaard teaches changing the hierarchical structure of said individual user preference information includes registration of new user preference item, deletion of an existing user preference item, or changing the parent node of a sub-tree of individual user preference information (e.g., see page 1 paragraph 3).

Regarding claim 24, Fruensgaard teaches changing the preference/nonpreference value of a user preference item and changing the preference/nonpreference value of user preference items located in the ancestor nodes of the changed preference item based on the usage history (e.g., see page 3 paragraphs 50-53).

Regarding claim 25, Fruensgaard changing the hierarchical structure of the individual user preference information, the preference/non-preference value is changed using a user interface (e.g., see page 3 paragraphs 46-49)

Regarding claim 31, Fruensgaard-Herz-Bieganski teaches one of a plurality of locations, wherein individual user preference information is different for the same user according to the physical location (Herz, col. 5 lines 22-37).

Art Unit: 2155

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fruensgaard et al. (Fruensgaard) (US 2002/0052880 A1) in view of Herz et al. (Herz) (US 5,758,257) in view of Bieganski in further view of Tso et al. (Tso) (US 6,421,733 B1).

Regarding claim 15, Fruensgaard-Herz- Bieganski does not explicitly teach user preference can be differently set depending on user's terminal device.

Tso, in the same field of endeavor, teaches teach user preference can be differently set depending on user's terminal device (col. 9 line 66-col. 10 line 36). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the preference information setting of Tso in the process of creating user profile of Fruensgaard-Herz- Bieganski because it was conventionally employed in the art to allow data transmitted between computers to be dynamically transcoded in response to a predetermined selection criterion.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh L. Duong whose telephone number is (703) 305-0295. The examiner can normally be reached on Monday- Friday, 8:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (703) 308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2155

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

O.D  
June 13, 2004



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SUPERVISORY PATENT EXAMINER